

FACE INVESTIGATION

SUBJECT: Farmer Dies After he is Run Over by Tractor in Farm Field

SUMMARY: A 69-year-old male farmer (the victim) died after being run over by a tractor. He had driven the tractor with an empty chopper wagon to a field to chop corn, and had hooked the wagon to the corn chopper. The event was unwitnessed, but apparently the tractor rolled forward over him, causing crushing chest injuries. He was able to get back on the tractor and drive approximately 1/4 mile home. He got off the tractor at home and used a cordless phone to call for emergency services. Emergency medical technicians (EMT's) found him sitting in a chair at home. The victim spoke a few words to the EMT's, telling them he had been run over by the tractor, and specifying the hospital to take him to. He died in the ambulance, while en route to the hospital. The FACE investigator concluded that, to prevent similar occurrences, farm tractor operators should:

- ! **place the transmission park...**
- ! **evaluate all hazards in area...**
- ! **keep the tractor's braking system in repair....**

INTRODUCTION:

On September 6, 1995, a 63-year-old male farmer was run over by a tractor in the farmyard where he was repairing machinery. The Wisconsin FACE field investigator was notified by the Wisconsin Department of Industry, Labor & Human Relations, Workers Compensation Division, on October 2, 1995. On September 30, 1996, the field investigator visited the farm and interviewed the victim's wife and daughter. The FACE investigator also obtained the death certificate, the sheriff's and coroner's reports and the state climatologist's weather report of the day.

The site of the incident was a farm owned and operated by the victim for forty years before the incident. This dairy farm produced corn and hay, and was located in hilly terrain. The victim was born and raised on a farm, and received on-the-job training and experience during his childhood and while operating his own farm. He usually worked alone, unless one of his children was available to help. He also had worked for about forty-five years sawing logs into lumber for sale.

INVESTIGATION:

The farm property consisted of a farmyard with farmhouse, equipment sheds and a barn, with crop and hay fields surrounding the farmyard and across the road. The gasoline-fueled Oliver 650 tractor involved in the incident was purchased new about 30 years ago and was used by the farmer since then. It had wide-set front wheels and fluid-filled back tires. The right and left brake pedals could be locked together with a flip lever, or controlled independently when unlocked. Family members and police authorities tested the brakes after the incident and found them functional.

On the day of the incident, the victim had operated the tractor from 6:30 A.M. until noon, discing the fields for fall seeding. He ate lunch with his wife and son, then slept for about an hour. Around 1:30 P.M. he

began to repair the chopper wagon. He was unable to crawl under the wagon to repair it and the farm did not have a hoist to lift it, so he used the bucket loader of the tractor to lift the wagon. He worked on the wagon for several hours, using a chain wrap around the wagon tongue and bucket loader, and a board propped under the loader to prevent the bucket and wagon from inadvertently falling. The air temperature was about 75° F. with no precipitation.

At 5:00 P.M., the son went to the barn to begin evening chores, and noted his father was working on the chopper wagon. The victim completed his work after that time, and was planning to raise the bucket to release the propped board so he could lower the wagon. To accomplish this, he stood in front of the right rear tractor tire so he could turn the key and operate the hydraulic lever without mounting the tractor. The tractor had been left in third gear, so when the key was turned it lurched forward and ran over the victim. It continued in a semicircular path, pushing the chopper ahead until it struck the wall of the machine shed and stopped moving. At 5:45, his son heard the tractor engine racing and left the barn to investigate. He found his father lying injured on the ground, with the tractor stalled and pushed against the shed. Before he died, the victim briefly told his son how the incident had occurred. Emergency medical services were summoned and arrived within fifteen minutes. The victim was pronounced dead at the scene.

CAUSE OF DEATH: The death certificate listed the cause of death as internal chest injuries and head injuries.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Farm tractor operators should be seated in the operator's seat before starting a tractor.

Discussion: Farm tractor starting systems are designed to be used while the operator is seated in the operator's seat. Starting methods that bypass this safety design, such as standing beside the tractor while turning the key, or using a metal object to short across starter terminals will place the operator in the unsafe position in front of tractor tires. In this case, the farmer was standing in front of a rear fluid-filled tire while he turned the key. The incident would have been prevented if he had been sitting in the tractor seat.

Recommendation #2: Farm tractor operators should place the transmission in neutral or park and follow the manufacturer's starting procedure.

Discussion: When a tractor engine is started in gear, it may move suddenly and run over anything in its path. Placing the transmission in neutral or park provides time for the operator to assume control of the tractor before moving it forward or back. Tractor starting systems are designed to prevent starting the engine unless the transmission is in neutral or park. In this case, the safety switches had been disconnected so the victim was able to start the tractor while it was in third gear. This caused it to quickly lurch forward and run over him.

Recommendation #3: Farm tractor owners/operators should keep the tractor's starting system in repair.

Discussion: The tractor in this case had been equipped with safety switches that prevented it from being started when the transmission was in gear. This safety feature has been deactivated prior to the incident. If the safety feature had been maintained, the tractor would not have started in a forward gear and the

incident might have been prevented.

Recommendation #4: Farmers and farm workers with functional limitations caused by illness or injury should seek and use the services of organizations and agencies that provide technical assistance and/or adaptive equipment to agricultural workers with disabling conditions.

Discussion: Farm machines, including tractors, are designed and manufactured for use by individuals with full functional capacity. Physically disabling conditions, such as illness or injury, can impair a farm worker's ability to operate a machine safely when carrying out his or her work duties. Technical assistance in designing and fitting adaptive equipment is available from agricultural safety specialists, including agricultural engineers, state vocational rehabilitation counselors, agricultural equipment and supply manufacturers, and Extension programs that serve people with physical disabilities. This incident might have been prevented if the mounting platform of the tractor had been modified to be comfortably accessible to the victim.